

Ping Program Without Internet:Program-11

```
it@rit:~$ cd message
rit@rit:~/message$ nano ping.py
```

```
import os
import sys

if len(sys.argv) != 2:
    print("Usage: python ping.py <hostname_or_ip>")
    sys.exit(1)

host = sys.argv[1]

response = os.system(f"ping -c 4 {host}")

if response == 0:
    print(f"{host} is reachable")
else:
    print(f"{host} is not reachable")
```

```
rit@rit:~/message$ vim Dockerfile
```

```
FROM python:3.9-alpine
```

```
# Alpine already contains BusyBox ping by default
```

```
COPY ping.py /ping.py
```

```
ENTRYPOINT ["python", "/ping.py"]
```

```
rit@rit:~/CPU-Delay$ sudo docker pull python:3.9-alpine
```

```
[sudo] password for rit:
```

```
rit@rit:~/CPU-Delay$ ls
```

```
cpuload.py Dockerfile Factorial
```

```
rit@rit:~/CPU-Delay$ docker save -o python_3.10_slim.tar python:3.9-alpine
```

```
permission denied while trying to connect to the docker API at unix:///var/run/docker.sock
```

```
rit@rit:~/CPU-Delay$ sudo docker save -o python_3.10_slim.tar python:3.9-alpine
```

```
rit@rit:~/CPU-Delay$ sudo chmod 777 python_9-alpine.tar
```

```
rit@rit:~/CPU-Delay$ sudo docker build -t ping .
```

```
rit@rit:~/message$ sudo docker build -t ping .
```

```
[sudo] password for rit:
```

```
rit@rit:~/message$ sudo docker run ping
Usage: python ping.py <hostname_or_ip>
rit@rit:~/message$ sudo docker run ping google.com
PING google.com (142.251.223.238): 56 data bytes
64 bytes from 142.251.223.238: seq=0 ttl=113 time=6.157 ms
64 bytes from 142.251.223.238: seq=1 ttl=113 time=6.583 ms
64 bytes from 142.251.223.238: seq=2 ttl=113 time=7.338 ms
64 bytes from 142.251.223.238: seq=3 ttl=113 time=6.163 ms
```

--- google.com ping statistics ---

4 packets transmitted, 4 packets received, 0% packet loss

round-trip min/avg/max = 6.157/6.560/7.338 ms

google.com is reachable

```
rit@rit:~/message$ ifconfig
```

```
> ^C
```

```
rit@rit:~/message$ ifconfig
```

```
br-4045742296a8: flags=4099<UP,BROADCAST,MULTICAST> mtu 1500
    inet 172.18.0.1 netmask 255.255.0.0 broadcast 172.18.255.255
    ether 2e:35:0b:6d:35:db txqueuelen 0 (Ethernet)
    RX packets 0 bytes 0 (0.0 B)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 0 bytes 0 (0.0 B)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0
```

```
br-5a64d02fef70: flags=4099<UP,BROADCAST,MULTICAST> mtu 1500
    inet 192.168.49.1 netmask 255.255.255.0 broadcast 192.168.49.255
    ether 0e:79:9d:9d:79:6b txqueuelen 0 (Ethernet)
    RX packets 0 bytes 0 (0.0 B)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 0 bytes 0 (0.0 B)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0
```

```
br-5fc3b57c80ee: flags=4099<UP,BROADCAST,MULTICAST> mtu 1500
    inet 172.20.0.1 netmask 255.255.0.0 broadcast 172.20.255.255
    ether 62:c1:73:20:a3:b0 txqueuelen 0 (Ethernet)
    RX packets 0 bytes 0 (0.0 B)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 0 bytes 0 (0.0 B)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0
```

```
br-a2590a68f2b3: flags=4099<UP,BROADCAST,MULTICAST> mtu 1500
    inet 172.19.0.1 netmask 255.255.0.0 broadcast 172.19.255.255
    ether 7e:96:12:1c:32:ee txqueuelen 0 (Ethernet)
    RX packets 0 bytes 0 (0.0 B)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 0 bytes 0 (0.0 B)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0
```

```
docker0: flags=4099<UP,BROADCAST,MULTICAST> mtu 1500
    inet 172.17.0.1 netmask 255.255.0.0 broadcast 172.17.255.255
```

```
inet6 fe80::d070:11ff:fe12:43cb prefixlen 64 scopeid 0x20<link>  
ether d2:70:11:12:43:cb txqueuelen 0 (Ethernet)  
RX packets 14 bytes 812 (812.0 B)  
RX errors 0 dropped 0 overruns 0 frame 0  
TX packets 12 bytes 1172 (1.1 KB)  
TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0
```

```
eno1: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500  
inet 172.1.44.107 netmask 255.255.254.0 broadcast 172.1.45.255  
inet6 fe80::70ab:f57:9b2d:d237 prefixlen 64 scopeid 0x20<link>  
ether d8:bb:c1:e6:01:1b txqueuelen 1000 (Ethernet)  
RX packets 486942 bytes 576216337 (576.2 MB)  
RX errors 0 dropped 0 overruns 0 frame 0  
TX packets 24156 bytes 7091836 (7.0 MB)  
TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0  
device interrupt 16 memory 0xb1200000-b1220000
```

```
lo: flags=73<UP,LOOPBACK,RUNNING> mtu 65536  
inet 127.0.0.1 netmask 255.0.0.0  
inet6 ::1 prefixlen 128 scopeid 0x10<host>  
loop txqueuelen 1000 (Local Loopback)  
RX packets 1795 bytes 189361 (189.3 KB)  
RX errors 0 dropped 0 overruns 0 frame 0  
TX packets 1795 bytes 189361 (189.3 KB)  
TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0
```

```
rit@rit:~/message$ sudo docker run ping 172.1.44.108  
PING 172.1.44.108 (172.1.44.108): 56 data bytes
```

```
--- 172.1.44.108 ping statistics ---  
4 packets transmitted, 0 packets received, 100% packet loss  
172.1.44.108 is not reachable
```